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Attorney Docket No. T2211-906224

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

First Named Inventor: BARRESI, Joseph Giovanni Art Unit: 1742

Appln. No.: 09/355,987 Examiner: Combs-Morillo

Filed: November 18, 1999 Confirmation No.: 7192

For: FOUNDRY ALLOY

McLean, Virginia

March 22, 2007

STATUS REQUEST ON PETITION FOR REVIVAL OF AN APPLICATION

RECEIVED

MAR **2 6** 2007

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

OFFICE OF PETITIONS

Sir:

On January 10, 2005, a Petition for Revival of An Application Unintentionally Abandoned with a Statement in Support of Petition to Revive was filed for the above-identified application in the Patent and Trademark Office (PTO). The transaction History in PAIR for this application shows that the Petition was entered on January 10, 2005, but does not show that any action was ever taken on the Petition. Copies of the papers and date stamped PTO card are enclosed for your convenience. As of this date, we have not received any Notices or communication from the PTO in regards to this matter. Therefore, please advise as to the status of this Petition.

Respectfully submitted,

MILES & STOCKBRIDGE, P.O

By: Mary W. M. Edward J. Kondracki

Reg. No. 20,604

David R. Schaffer Reg. No. 43,089

1751 Pinnacle Drive, Suite 500 McLean, VA 22102-3833 Telephone: (703) 610-8649 4845-0538-6241

Petition For Revival Of An Application For Patent Abandoned Unintentionally Under 37 CFR 1.137(b) (Large Entity) Docket No. T2211-906224							
In Re	Application (ni BARRESI et al.	-	MAR 2 2	2007	
• •	ation No. 355,987	Filing Date Nov. 18, 1999	Examiner J. COMBS		Customer No.	Group Art Unit 1742	Confirmation No
Invention: Improved Foundry Alloy							
NC		formation or assista	Attention: Office o Mail Stop Per COMMISSIONER FO P.O. Box 14 Alexandria, VA 22 Ince is needed in comp 6-9282.	tition OR PATE 150 1313-145	<u>ENTS</u> .	contact Petition	s
action	ove-identifie by the Pate	ed application becar nt and Trademark (in the Office notice (ne abandoned for failu Office. The date of ab or action plus any exten	andonm sion of t	ent is the day ime actually ob	after the expira tained.	
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Petition For Revival Of An Application For Patent Abandoned Unintentionally Under 37 CFR 1.137(b) (Large Entity)

Docket No. T2211-906224

In Re Application Of:

	пррпсацоп (i BARRESI et al.			
Application No. 09/355,987		Filing Date Nov. 18, 1999	Examiner J. COMBS	Customer No.	Group Art Unit 1742	Confirmation No.
Inventi	on:					
	Impro	oved Foundry Alloy				

•			Calculation and Paymen	nt of Fees		
Enclosed	d are the fol	lowing fees:				
6. 🖾	Petition fee	e under 37 CFR 1.17((m) in the amount of:			\$1,500.00
7.	Fee for am	nendment in the amou	unt of:			
8. 🗆	Fee for ext	tension of time to resp	pond to Office Action in the	amount of:		
9. 🗆	Issue fee ii	n the amount of:				
10. 🗆	Continuing	application filing fee	in the amount of:			
11. 🗆	Terminal di	isclaimer fee in the ar	mount of:	•		
12. 🗆						
				Total fo	ees enclosed:	\$1,500.00
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Petition For Revival Of An Application For Patent Abandoned Unintentionally Under 37 CFR 1.137(b) (Large Entity)

Docket No. T2211-906224

In Re Application Of:

Joseph Giovanni BARRESI et al.

Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
09/355,987	Nov. 18, 1999	J. COMBS	181	1742	7192

Invention:

Improved Foundry Alloy

Statement

The entire delay in filing the required reply from the due date for the required reply until the filing of a grantable petition under 37 CFR 1.137(b) was unintentional.

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OFFICE OF PETITIONS

Edward J. Kondracki Reg. No. 20,604 Dated: 10 January 2005

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on

(Date)

Signature of Person Mailing Correspondence

Typed or Printed Name of Person Mailing Correspondence

cc: Customer No. 181



Docket: T2211-906224

IN THE UNITED STATES PATENT AND TRADEMARK O

In re application of

Confirmation No.: 7192

Joseph BARRESI et al.

: Group Art Unit: 1742

Serial No.: 09/355,987

: Examiner: Janelle Combs-Morillo

Filed: August 18, 1999

For: Improved Foundry Alloy

McLean, Virginia January 10, 2005

STATEMENT IN SUPPORT OF PETITION TO REVIVE FOR PATENT ABANDONED UNINTENTIONALLY

Commissioner for Patents P.O. Box 1450 Alexandria VA 22313-1450

Sir:

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This application was unintentionally abandoned on October 30, 2002, for failure to respond to an Official Action, namely the non-final rejection dated September 11, 2002.

Statement of Relevant Facts

On March 11, 2002, a Continued Prosecution Application Request was filed.

On May 3, 2002, a non-final Office Action was received indicating that the Request filed on March 11, 2002, for continued prosecution application (CPA) was acceptable and that the CPA had been established. A copy of the non-final Office Action is enclosed as Exhibit A. See page 2, numbered paragraph 1, for Examiner's statement of acceptance. The Office Action essentially repeated the objections set forth in the Official Action of September 11, 2001, indicating Claims 16 and 17 to be allowable upon correction of informalities and rejecting Claims 1-3, 5 and 7-20.

On August 16, 2002, the Patent and Trademark Office issued a Notice indicating that the Request for Continued Prosecution Application (CPA) under 37 CFR 1.530(d) was improper, but that the Request for the CPA has been treated as a Request for Continued Examination (RCE) under 37 CFR 1.114.

However, the Notice went on to indicate in a footnote that the "constructive" RCE, was improper because it was not accompanied by a "submission" as required under 37 CFR 1.114. The "submission" referred to is the prior Amendment. A submission is not required in connection with a CPA Request and the "submission" was filed separately.

Apparently, this informality was overlooked inasmuch as an Amendment was filed on September 27, 2002. This Amendment was timely with respect to the Official Action of May 3, 2002, but was not timely with respect to the Official Action Non-Final rejection of September 11, 2001, which the Patent and Trademark Office apparently considered as the operative Official Action when the "constructive" RCE was considered inoperative.

As a result of this oversight, according to PAIR, a Notice of Abandonment was issued on October 31, 2002, under the signature of Roy King, Supervisory Examine because "The CPA (RCE)" filed March 11, 2002, was improper". In a subsequent telephone conversation between Applicant's attorney and the Group Supervisor, Applicant's attorney was advised that the Amendment filed by September 22, 2002, would be accepted as timely.

Based on the telephone conversation with the Group Supervisor, Applicant's attorney was under the impression that the Patent Office Notice of Abandonment would be withdrawn in view of the Examiner's statement that the Request filed on March 11, 2002, was accepted as a CPA, and the Supervisor's acceptance of the follow-up Amendment of September 27, 2002, and as a result did not submit the Notice of Abandonment to docketing.

Subsequently, the Attorney prosecuting this matter has left the Firm without taking further action and these facts came to light only recently when the undersigned reviewed matters being handled by the former attorney and the application file.

Upon review of the application file, the undersigned noted a yellow sticky tab in the file having the notation thereon to a secretary "Vicki please prepare a Petition to Revive based upon unintentional delay. Thanks J".

The note never reached the Secretary because the docket entries showed the application to be alive, and there was no reason to pull and examine the file until the responsible attorney left the Firm and his cases were reviewed.

As a result of the foregoing, the application was unintentionally abandoned and revival thereof is earnestly solicited.

I, the undersigned authorized signatory of Applicants, being hereby warned that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any resulting patent, declare that I am properly authorized to execute this Statement on behalf of the Applicants.

Respectfully submitted,

MILES & STOCKBRIDGE P.C.

By:

Edward J. Kondracki Reg. No. 20,604

1751 Pinnacle Drive, Suite 500 McLean, Virginia 22102-3833 Telephone: (703) 610-8627 #9257024v1





United States Patent and Trademark Office

APPLICATION NO. FILING DATE ind Trademark Office OF PATENTS AND TRADEMARKS 09/355,987 FIRST NAMED INVENTOR 11/18/1999 ATTORNEY DOCKET NO. JOSEPH GIOVANNI BARRESI CONFIRMATION NO. 7590 MILES & STOCKBRIDGE P.C. 05/03/2002 6224/JCK 1751 PINNACLE DRIVE, SUITE 500 7192 MCLEAN, VA 22102-3833 EXAMINER

COMBS, JANELL A ART UNIT PAPER NUMBER 1742 DATE MAILED: 05/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

NON-FINAL

BY DUE DATE CALL UP



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MAR 2 2 2007 B		VIT				
1 4	Application No.	Applicant(s)				
Office Action Summany	09/355,987	BARRESI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Janelle Combs-Morillo	1742				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status						
1) Responsive to communication(s) filed on 111	<u>March 2002</u> .					
	is action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-3,5 and 7-20 is/are pending in the		RECEIVED				
4a) Of the above claim(s) is/are withdray	vn from consideration.					
5) Claim(s) is/are allowed.		MAR 2 6 2007				
6)⊠ Claim(s) <u>1-3,5 and 7-20</u> is/are rejected.	,	OFFICE OF PETITIONS				
7) Claim(s) 16 and 17 is/are objected to.		OLLIOT OLL THUMO				
8) Claim(s) are subject to restriction and/or election requirement. Application Papers						
9) The specification is objected to by the Examine	ī.					
10)☐ The drawing(s) filed on is/are: a)☐ accept						
Applicant may not request that any objection to the						
11) The proposed drawing correction filed on		oved by the Examiner.				
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Ex	aminer.					
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)⊠ All b)□ Some * c)□ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents	s have been received in Applicati	on No				
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) The translation of the foreign language provisional application hás been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal i	(PTO-413) Paper No(s) Patent Application (PTO-152)				
U.S. Patent and Trademark Office						

Application/Control Number: 09/355,987

Art Unit: 1742

DETAILED ACTION

Continued Prosecution Application

1. The request filed on March 11, 2002 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/355,987 is acceptable and a CPA has been established. An action on the CPA follows.

Claim Objections

2. Claims 16 and 17 objected to because of the following informalities: claims 16 and 17 are dependent on canceled claim 6. Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-3, 5, 7-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the ASM Handbook: Vol. 2 Properties and Selection: Nonferrous Alloys and Special-Purpose Materials.

The <u>ASM Handbook: Vol. 2 Properties and Selection: Nonferrous Alloys and Special-Purpose Materials</u> teaches that cast aluminum alloy 356.0 has a composition comprising: 0.20-0.45% Mg, 6.5-7.5% Si, and 0.6% max. Fe (page 164), which overlaps the composition as presently claimed in claims 1, 4, 5, and 15. The <u>ASM Handbook: Vol. 2</u> teaches that "the cells

Application/Control Number: 09/355,987

Art Unit: 1742

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contained within the dendrite structure correspond to the dimensions separating the arms of primary dendrites" (page 133, column 2, lines 26-29), and that castings of Al-Si alloy A356 have high strength and high elongation when the dendritic cell size ranges from ~20-40 µm (Fig. 3 page 134). Said Al-Si casting alloy is typically solution heat treated at 535-540°C for 8-12 hours, quenched in hot water (~65-100°C), and aged at 150-230°C for 2-9 hours (Table 36, page 168), which are substantially the same process steps as presently claimed in claims 12, 13, 14, 19, 20.

The ASM Handbook: Vol. 2 Properties and Selection: Nonferrous Alloys and Special-Purpose Materials teaches that cast aluminum alloy 357.0 has a composition comprising: 0.45-0.6% Mg, 6.5-7.5% Si, and 0.15% max. Fe (page 166), which overlaps (or touches the boundary) of the composition as presently claimed in claims 1, 4, 5, and 15. Said alloy is typically solution heat treated at 540°C for 8 hours, hot water quenched, followed by aging ~ 170°C for 3-5 hours (page 166), which are substantially the same process steps as presently claimed in claims 12, 13, 14, 19, 20.

The prior art does not teach what phases are present in the final (and intermediate) aluminum alloy processed as stated above. However, the present specification states that "solution treatment at $540\,^{\circ}$ C for 2 or more hours produced desired levels of transformation of π to β phase" (page 8 lines 13-15), which is substantially the same as the solution heat treatment steps of the prior art. The examiner asserts that because the prior art discloses substantially the same aluminum alloy processed in substantially the same steps, substantially the same product would result as presently claimed. It is held the <u>ASM Handbook: Vol. 2 Properties and Selection: Nonferrous Alloys and Special-Purpose Materials</u> has created a prima facie case of obviousness of the presently claimed invention.

Application/Control Number: 09/355,987

Art Unit: 1742

5. Claims 1-3, 5, 7-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over JA 53-16312 in view of the ASM Handbook: Vol. 2 Properties and Selection: Nonferrous Alloys and Special-Purpose Materials.

JA 53-16312 teaches an aluminum alloy comprising 6-8% Si, 0.2-0.4% Mg, and 0.001-0.15% Fe, which overlaps (or touches the boundary) of the composition as presently claimed in claims 1, 4, 5, and 15. Said alloy is processed through the steps comprising: casting, solution heat treating 545-555°C for about 9 hours, quenching in 70°C hot water, and aging at ~130°C for 4 hours (see abstract), which are substantially the same process steps as presently claimed in claims 12, 13, 14, 19, 20.

The prior art of JA 53-16312 does not teach the solidification rate of the casting or what phases are present as the result of the above mentioned process steps. However, the <u>ASM</u> Handbook: Vol. 2 Properties and Selection: Nonferrous Alloys and Special-Purpose Materials, as stated above, teaches the solidification of castings at rapid rates in order to produce high quality castings with small DAS 20-40 μ (p 133-134). The prior art does not teach what phases are present in the final (and intermediate) aluminum alloy processed as stated above. However, the present specification states that "solution treatment at 540°C for 2 or more hours produced desired levels of transformation of π to β phase" (page 8 lines 13-15), which is substantially the same as the solution heat treatment steps of the prior art.

Therefore, it would have been obvious to one of ordinary skill in the art to solidify said aluminum casting (as taught by JA 53-16312) at rapid solidification rates in order to produce a high quality casting as taught by <u>ASM Handbook</u>: Vol. 2, because <u>ASM Handbook</u>: Vol. 2





Dkt. T2211-906224

S.N. 09/355,987

Title: Improved Foundry Alloy

This will acknowledge receipt in Patent Office re filing of the following:

1. Petition for Revival of an Application for Patent Abandoned Unintentionally Under 37 CFR 1.137(b) with Exhibit A and Statement in Support of Petition to Revive for Patent Abandoned Unintentionally

2. \$1500 ck# /2618

Due Date:

Date Filed: 01-10-05

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